

Poster Preparation and Grading Guidelines

Presentation Title: _____

Category	Question	Max Points	Group Score
Introduction	Does the project title succinctly describe what was done?	10	
	By reading the abstract, did you get a complete overview of what was accomplished?	10	
	Does the background information support and relate to the work done?	10	
	Is the significance of the project clearly presented?	10	
	Is there a clearly defined statement of the problem and/or the hypothesis?	10	
Experimental	By reading the procedure, do you understand the work that was done?	30	
	Are procedural and instrumental conditions concisely stated?	10	
Results and Discussions	Are the results well presented (formatted and captioned appropriately)?	10	
	Are the data presented in a concise manner	15	
	Are the results well interpreted (authors used the scientific facts to explain and interpret their data)?	20	
	Was proper data analysis applied?	20	
Conclusions	Does the conclusion concisely address the statement of the problem and the hypothesis in light of the observed data/results?	10	
References	Did the authors appropriately reference information and/or quantitative data throughout their poster?	10	
	Are the references appropriately formatted?	5	
General	Was the quality of the work/project appropriate to the level of the course?	10	
	What is your overall rating of the quality of the poster presentation?	10	
	Did the group answer questions well?	10	
	Totals	210	

Poster and Poster Presentation: Your laboratory group will prepare a poster and present the outcomes of this your independent research project to the entire class (on the last day of class - April 26th) and also at the Chemistry Department poster session on April 27th.

A grading rubric for the poster is also posted on Blackboard. Your grade will be determined both by the poster itself (majority) and by the presentation of the poster at the Chemistry department session on Friday. You will need to have your poster electronically prepared for printing by 8:30 AM on Thursday morning. That will allow enough time for printing by Friday (there will be quite a cue since most advanced classes in Chemistry have posters to print for this event). You will be presenting your poster to your peers on Thursday as a practice session (we will use the overhead projector in GH348 to display an electronic version of your poster). Peers will review your poster/presentation not for a grade, but in order to better prepare you for the graded evaluation on Friday.

For this poster, assume that your target audience has completed the prerequisites for this class: Analytical Chemistry (CH321) and the first semester of Biochemistry lecture (CH361), along with all of general and organic chemistry. Note that this assumption does NOT include this laboratory class itself.

My general rule for preparing a poster is more pictures and fewer words. You will be standing next to your poster and presenting it to the class so you can state orally the long paragraphs of information and not write it out on your poster. Some resources for presenting and preparing posters are noted below. Since you have all presented posters previously in analytical chemistry, we will not dwell on this significantly in the course. The general categories that your poster should cover include:

- 1) Title Area: A short sentence that accurately outlines the general idea of your poster. This portion of the poster should also include all of the authors and your school affiliation.
- 2) Introduction: A short description of the background information required to understand your poster. It should contain a figure (drawing or picture) that pertains to the introduction. It should answer the questions, 1) why is this project interesting, 2) what scientific hypothesis/question are you trying to address, and 3) what similar experiments have been performed previously (primary scientific literature references).
- 3) Methods: This section can often be minimal (especially in comparison to a lab report), depending on whether your methods are novel or interesting, because a poster should not be bogged down in the minute experimental details. A figure that graphically outlines the methods will generally be far more effective than text.
- 4) Results and Discussion: The major section of the poster, the results and discussion should contain all of the figures (tables and plots) that outline the significant research findings. Figures should be properly labeled and with a descriptive title and caption to accompany each figure. The size of the figures should match the large size of a poster presentation. Short paragraphs or textual lists highlighting the important results are appropriate but long paragraphs are not.
- 5) Conclusions: A short paragraph or a few bullet points that highlight the most important results from your research.
- 6) Future Work: **Specific** experimental work that can be done to improve and/or expand upon the work presented in this poster. This section will mostly be problem-solving ideas and/or alternative methods if meaningful experimental results were difficult to obtain. If experimental results were obtained, specific experiments that expand upon the central hypothesis should be proposed.
- 7) Acknowledgements: You have a lot of leeway here – can be (at your discretion) more offbeat and entertaining, but should still deliver the message
- 8) References: You should have references cited in both your Introduction and Results & Discussion sections - possibly in Methods as well. I would say 4-10 citations would be appropriate.

You should visit the following URLs (last updated April 2012) that offer tips on preparing effective research posters.

“Creating Effective Poster Presentations” by George R. Hess, Kathryn W. Tosney, and Leon H. Liegel (web site hosted by North Carolina State University)

<http://www.ncsu.edu/project/posters/NewSite/>

“Creating An Effective Scientific Poster Presentation” University of Minnesota:

http://www.tc.umn.edu/~schne006/tutorials/poster_design/